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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/653,413	08/31/2000	Ruth Wilson	NC 80,172	5344

26384	7590	03/23/2005

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EXAMINER
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ART UNIT	PAPER NUMBER
2144	

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

		Application No.	Applicant(s)
Office Action Summary		09/653,413	WILSON ET AL.
		Examiner	**Art Unit**
		Joseph R Maniwang	2144

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _23 December 2004_.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _23-27,29,31,35,38-43 and 45-55_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _23-27, 29, 31, 35, 38-43, 45-51, 54, and 55_ is/are rejected.

7)☒ Claim(s) _52-53_ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _23 December 2004_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Drawings

1.   The drawings were received on 12/23/04. These drawings are accepted.

Claim Objections

2.   Claim 51 is objected to because of the following informalities: recitation of "area

of interested" appears to be a typographical error. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of
> making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the
> art to which it pertains, or with which it is most nearly connected, to make and use the same and shall
> set forth the best mode contemplated by the inventor of carrying out his invention.

4.   Claim 45 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply

with the enablement requirement. The claim(s) contains subject matter which was not

described in the specification in such a way as to enable one skilled in the art to which it

pertains, or with which it is most nearly connected, to make and/or use the invention.

The claim recites executing an applet on a client computer without executing separate

software in the client computer. The Specification does not support this functionality,

instead providing examples where execution of an applet requires execution of separate

software such as a browser (see Specification, p. 18), and one of ordinary skill in the art

would not be enabled to carry out such functionality as claimed.

5.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

6.   Claims 23 and 31 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

7.   Claim 23 recites the limitation "the geospatial data". There is insufficient

antecedent basis for this limitation in the claim.

8.   Claim 31 recites the limitation "the geospatial data". There is insufficient

antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

9.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by
> another filed in the United States before the invention by the applicant for patent or (2) a patent
> granted on an application for patent by another filed in the United States before the invention by the
> applicant for patent, except that an international application filed under the treaty defined in section
> 351(a) shall have the effects for purposes of this subsection of an application filed in the United States
> only if the international application designated the United States and was published under Article 21(2)
> of such treaty in the English language.

10.   Claims 23, 24, 29, 38, 46, and 47 are rejected under 35 U.S.C. 102(e) as being

anticipated by Chan et al. (U.S. Pat. No. 6,381,603), hereinafter referred to as Chan.

11.   Regarding claims 23 and 38, Chan disclosed receiving from a client an area of

interest (AOI) from a visual image (see column 2, lines 56-64; column 5, line 65 through

column 6, line 5; column 6, lines 59-65), identifying data for the AOI by querying a

database for data objects associated with the AOI (see column 6, line 66 through

column 7, line 8), receiving the data associated with the AOI for creating a database for

the results, and transmitting the results to the client with the data overlaid on a map

display (see column 7, lines 8-15). Chan disclosed the possibility of arranging

databases in an object-oriented manner (see column 5, lines 19-20; column 8, lines 10-

11). Chan further disclosed providing information to the client over the Internet and

through the use of a GUI (see column 5, lines 21-39; column 5, lines 65-66), thus

reading on the broad concept of a web-based applet for viewing data objects as

claimed. Chan disclosed a system for executing the above method comprising three

processors connected via a network, including a client computer, a server to serve the

client, and a database coupled to the server (see column 2, lines 29-38).

12.   Regarding claim 24, Chan disclosed distributing data including spatial and

temporal information over a network, the disclosed database containing both spatial and

temporal information (see column 9, line 45 through column 10, line 1).

13.   Regarding claim 29, Chan disclosed receiving database information, where the

returned information included a library of database information (such as the AOI), theme

(such as event data), and features (such as event sponsor or event time) in response to

a query (see column 10, lines 9-19).

14.   Regarding claim 46, Chan disclosed receiving the data associated with the AOI

for creating a database for the results (see column 7, lines 8-15).

15.   Regarding claim 47, Chan disclosed storing response data without downloading
the database to the client as claimed (see column 7, lines 10-15).

16.   Claims 23, 38, 43, 46, 47, and 51 are rejected under 35 U.S.C. 102(e) as being
anticipated by Semple et al. (U.S. Pat. No. 6,408,307), hereinafter referred to as
Semple.

17.   Regarding claims 23 and 38, Semple disclosed receiving from a client an AOI
from a visual image (see column 2, lines 17-20, 27-30, 44-48; column 7, lines 20-35;
column 8, lines 29-38), and responding to the client request by querying a database for
data associated with the AOI and transmitting the data on a display map to the client
(see column 12, lines 17-33). Semple disclosed the use of object-oriented
programming for database interactions, and the use of the Internet for communicating
(see column 12, lines 17-33).

18.   Regarding claim 43, Semple disclosed updating the data as claimed (see column
5, lines 40-52).

19.   Regarding claim 46, Semple disclosed the use of object-oriented programming
for database interactions (see column 12, lines 17-33).

20.   Regarding claim 47, Semple disclosed storing the database on the network
without downloading the database to the client (see column 12, lines 17-25).

21.   Regarding claim 51, Semple disclosed the use of a world map display as claimed
(see column 7, lines 56-61).

Claim Rejections - 35 USC § 103

22.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

23.   Claims 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Chan et al. (U.S. Pat. No. 6,381,603), hereinafter referred to as Chan, further in

view of Koller et al. ("Virtual GIS: A Real-Time 3D Geographic Information System",

GVU Technical Report GIT-GVU-95-14, Georgia Institute of Technology), hereinafter

referred to as Koller, and further in view of Trovato (U.S. Pat. No. 6,183,364),

hereinafter referred to as Trovato.

24.   Chan disclosed the invention substantially as claimed as detailed above. The

system disclosed by Chan can be considered a Geographic Information System (GIS),

as it fits the definition of a GIS, which is a computer system for capturing, storing,

checking, integrating, manipulating, analyzing, and displaying data related to positions

on the Earth's surface. Chan did not disclose displaying data objects in 3D, and further

did not disclose converting the 2D data objects to 3D for display.

25.   Koller taught of a "Virtual GIS", in which there was provided a 3D visualization

means for terrain data. Koller disclosed that such a Virtual GIS could be used

anywhere a traditional GIS could be used (see page 2, section 1).

26.   Trovato disclosed an electronic game using map data to create a "rich

environment" (see Abstract). A rich environment was, for example, a simulated city

(see column 2, lines 30-33). The maps providing information for creating the rich

environments were two-dimensional (see column 2, lines 19-20). Furthermore, rich

environments were created from the 2D maps by an "environment grower" (see column

2, lines 20-30).

27.   Chan did not disclose displaying geographical data in 3D, but through the

teachings of Koller, it would have been obvious to incorporate such an option. One of

ordinary skill in the art would have been motivated to consider the use of 3D display in

the invention of Chan, as Koller stated the possibility of using Virtual GIS anywhere a

traditional GIS was used (see page 2, section 1). Furthermore, Chan stated the desire

to provide fast and accurate information (see column 3, lines 30-56), the success of

which would have been benefited from the use of Virtual GIS, as Koller disclosed that

Virtual GIS provided advantages in both speed and detail in a GIS as compared to

conventional 2D or even other 3D GIS (see page 2, section 1 and page 9, section 6).

Claim 25 is thus rejected.

28.   Using a process to convert 2D data into 3D data would have also been obvious

to incorporate in the invention of Chan. Trovato taught the use of an "environment

grower" that made use of 2D maps stored in a database to create rich environments, a

type of which included the Virtual GIS mentioned above (see column 2, lines 19-35).

Claim 26 is thus rejected, since Trovato disclosed such a Virtual GIS-type environment

grower to convert 2D map data into a 3D rich environment for display as claimed.

29.   Claims 31, 40-43, and 54, are rejected under 35 U.S.C. 103(a) as being
unpatentable over Chan (U.S. Pat. No. 6,381,603), hereinafter referred to as Chan, and
further in view of what was known at the time of invention.

30.   Chan disclosed receiving from a client an area of interest (AOI) from a visual
image (see column 2, lines 56-64; column 5, line 65 through column 6, line 5; column 6,
lines 59-65), identifying data for the AOI by querying a database for data objects
associated with the AOI (see column 6, line 66 through column 7, line 8), receiving the
data associated with the AOI for creating a database for the results, and transmitting the
results to the client with the data overlaid on a map display (see column 7, lines 8-15).
Chan disclosed the possibility of arranging databases in an object-oriented manner (see
column 5, lines 19-20; column 8, lines 10-11). Chan further disclosed providing
information to the client over the Internet and through the use of a GUI (see column 5,
lines 21-39; column 5, lines 65-66), thus reading on the broad concept of a web-based
applet for viewing data objects as claimed. Chan disclosed a system for executing the
above method comprising three processors connected via a network, including a client
computer, a server to serve the client, and a database coupled to the server (see
column 2, lines 29-38). Chan disclosed the server operating under the Solaris operating
system (see column 7, lines 49-51), while the client operated under the Windows
operating system (see column 8, lines 38-40). Chan disclosed the ability to update the
database through the Internet (see column 2, lines 39-53).

31.   Chan did not explicitly disclose the use of two or more disparate data formats. Specifically, Chan did not disclose any of the claimed data formats for use with the geospatial data, such as Vector Product Format (VPF) or Raster Product Format (RPF).

32.   Examiner takes Official Notice (see MPEP § 2144.03) that the use of VPF and RPF in a computer networking environment were well known in the art at the time the invention was made. Specifically, VPF and RPF were known standard formats for geographic data in GIS.

33.   Chan disclosed the use of a map database (see column 9, line 63 through column 10, line 1). Using VPF or RPF standards in such a database would have been obvious since both standards were well known data formats for use in GIS at the time of invention. One of ordinary skill in the art would have been motivated to use such standards, as the invention would have benefited from the adherence to a convention standard, increasing flexibility and efficiency as desired by Chan (see column 3, lines 31-56).

34.   Claims 27, 35, 39, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chan et al. (U.S. Pat. No. 6,381,603), hereinafter referred to as Chan (USPAT), and further in view of Chan et al. ("Efficient Query Result Retrieval over the Web", Proceedings, Seventh International Conference on Parallel and Distributed Systems, 2000, 4-7 July 2000), hereinafter referred to as Chan (IEEE).

35.   Chan (USPAT) disclosed the invention substantially as claimed as detailed above. Chan (USPAT) described a GIS using an object-oriented database over the

Internet, but did not specifically mention conforming the system to the CORBA

specifications.

36.   Chan (IEEE) disclosed efficient methods for querying a database over the

Internet. Of most interest is disclosed use of CORBA, stated by Chan (IEEE) to be

commonly implemented in distributed object database servers (see Abstract). Querying

databases over the Internet was also discussed by Chan (IEEE) in the context of a GIS

(see page 161, section 1).

37.   Chan (USPAT) disclosed a GIS, and further the ability to use a distributed

database architecture (see column 7, lines 54-64) in which databases could be object-

oriented (see column 8, lines 10-11). Chan (USPAT) further disclosed the use of the

Internet as means for data distribution (see column 2, lines 13-17). Chan (IEEE)

disclosed that in the Web environment, a database server was commonly implemented

with a distributed object technology such as CORBA, such a database server

referenced in context to a GIS (see Abstract). Therefore, implementing the distributed

database architecture in the GIS disclosed by Chan (USPAT) to conform to the CORBA

protocol would have been obvious, as it was disclosed by Chan (IEEE) to be a common

practice for such database servers. Furthermore, the database disclosed by Chan

(USPAT) was described as object-oriented, distributed data objects over the Internet,

and was used in a GIS, thus benefiting from the use of the CORBA protocol, which was

designed to facilitate such communications.

38.   Claims 49, 50, and 55 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Chan et al. (U.S. Pat. No. 6,381,603), hereinafter referred to as

Chan, and further in view of Foust (U.S. Pat. No. 6,240,369).

39.   Chan disclosed receiving from a client an area of interest (AOI) from a visual

image (see column 2, lines 56-64; column 5, line 65 through column 6, line 5; column 6,

lines 59-65), identifying data for the AOI by querying a database for data objects

associated with the AOI (see column 6, line 66 through column 7, line 8), receiving the

data associated with the AOI for creating a database for the results, and transmitting the

results to the client with the data overlaid on a map display (see column 7, lines 8-15).

Chan disclosed the possibility of arranging databases in an object-oriented manner (see

column 5, lines 19-20; column 8, lines 10-11). Chan further disclosed providing

information to the client over the Internet and through the use of a GUI (see column 5,

lines 21-39; column 5, lines 65-66), thus reading on the broad concept of a web-based

applet for viewing data objects as claimed. Chan disclosed a system for executing the

above method comprising three processors connected via a network, including a client

computer, a server to serve the client, and a database coupled to the server (see

column 2, lines 29-38).

40.   Chan did not specifically disclose the use of data from environmental sensors,

temporal weather information, or providing a local weather forecast as claimed.

41.   In a related art of delivering region-specific data, Foust disclosed a system for

distributing weather information stored in a database. Foust disclosed obtaining data

from environmental sensors (see column 9, lines 9-30). Such weather information was

time-sensitive (i.e., temporal) and stored in a weather information database (see column

9, line 57 through column 10, line 24). Foust disclosed displaying the weather

information stored on a database to a client through a map display (see column 16, line

36 through column 17, line 12). Foust further disclosed that such information could be

sent as a web page (see column 17, lines 29-37). This information could be provided to

a client regarding a requested location, or in other words, an AOI (see column 8, lines

20-28).

42.   It would have been obvious to one of ordinary skill in the art at the time of

invention to combine the teachings of Chan and Foust to provide a system for delivering

temporal weather information to a client associated with a requested area of interest in

the form of a web page as claimed. The invention of Chan related to delivering

geographic information from a database to a client associated with a requested AOI.

The invention of Foust was similar to that of Chan in that weather information from a

database could be delivered to a client requesting such information associated with an

AOI. One of ordinary skill in the art would have been motivated to consider

incorporating the teachings of Foust into the invention of Chan as Foust disclosed that

weather information was useful and provided critical storm information (see column 8,

lines 8-18).

Allowable Subject Matter

43.   Claims 52 and 53 are objected to as being dependent upon a rejected base

claim, but would be allowable if rewritten in independent form including all of the

limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Joseph R Maniwang whose telephone number is (571)

272-3928. The examiner can normally be reached on Mon-Fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, William A Cuchlinski can be reached on (571) 272-3925. The fax phone

number for the organization where this application or proceeding is assigned is 703-

872-9306.

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JM

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